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Yates et al.

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(54) **RECONFIGURABLE SERVICE PROVISION
VIA A COMMUNICATION NETWORK**

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709/227; 707/104**

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(57) **ABSTRACT**

A services provision system provides information services over one or more communications networks and has a software infrastructure divided into domains. Each domain has an intelligent software agent and this community of agents sits in a computing environment represented in each domain by a DPE kernel. The community of agents co-operates to provide service and service management functionality to a user. At least one of the agents is reconfigurable to change the functionality the system makes available. Reconfigurability is based on the use of a plurality of reusable software modules, the agent reconfiguring by selecting a new combination of modules. The software modules themselves incorporate rules, or policies, which determine process steps offered by the modules at run-time. These policies are external to the modules and may be loaded at run-time, allowing dynamic modification to functionality of the system. The system as a whole offers functionality associated with using services, providing them and managing them and the reconfigurability allows it to offer the different types of functionality in an efficient way. It also allows access control to functionality at different levels with particularly good security against fraudulent use.

29 Claims, 9 Drawing Sheets

